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FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Amite County Schools

Prepared By:
Travis W. Stewart
Miss. Forestry Commission

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-01-23

Plan Type:
Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: 1603N04E

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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LANDOWNER INFORMATION

Name:	Amite County Schools	
Mailing Address:	P. O. Box 378	
City, State, Zip:	Liberty, MS 39645	
Country:	United States of America	
Contact Numbers:	Home Number:	
	Office Number:	601-657-4361
	Fax Number:	
E-mail Address:		
Social Security Number (optional):		

FORESTER INFORMATION

Name:	Travis W. Stewart , Forester	
Forester Number:	02367	
Organization:	Miss. Forestry Commission	
Street Address:	P. O. Box 242	
City, State, Zip:	Liberty, MS 39645	
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PROPERTY LOCATION

County:	Amite	Total Acres:	614	Latitude:	-90.81	Longitude:	31.22
Section:	16	Township:	3N	Range:	4E		

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

Disclaimer

This information was derived from a small sampling of forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be relected in this plan.

OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices.

Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General
The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone

PROPERTY DESCRIPTION

General Property Information
This property is located in the central part of the county about 5 miles north of Liberty off of McClain Road. This section contains 614 acres of which 599 acres are forested.

Water Resources
No perennial water resources were identified during a reconnaissance of the property. However, intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices.

Timber Production
The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species
No threatened and endangered species were identified during the reconnaissance and evaluation of your property.

Interaction with Surrounding Property
Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General
Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property: Ora, Smithdale, Province, Ariel, Saffell, Ruston, and Gillsburg

Archeological or Cultural Resources
These areas can range from churches, old cemeteries or Indian mounds to old home sites or other areas of historical significance.

No Archeological or Cultural resources were identified during a reconnaissance of the property. However, if Archeological or Cultural resources are discovered anytime on the property special managements measures will be applied immediately in order preserve these sensitive areas.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices.*

Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

Boundary Lines

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

Note: Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are

installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

Wildlife Management General
The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

Timber Management
Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

SOIL TYPES

Ora
The Ora component makes up 90 percent of the map unit. Slopes are 2 to 8 percent. This component is on uplands. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer, fragipan, is 18 to 42 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. Loblolly Site Index = 86. Longleaf Site Index = 70.

Smithdale
The Smithdale component makes up 90 percent of the map unit. Slopes are 8 to 35 percent. This component is on hillslopes. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e and 7e. This soil does not meet hydric criteria. Loblolly Site Index = 86. Longleaf Site Index = 69. Slash Site Index = 85.

Providence
The Providence component makes up 90 percent of the map unit. Slopes are 2 to 8 percent. This component is on uplands. The parent material consists of silty loess over sandy marine deposits. Depth to a root restrictive layer, fragipan, is 18 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is

moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 87. Longleaf Site Index = 73.

Ariel
The Ariel component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 95.

Saffell
The Saffell component makes up 90 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes on hills. The parent material consists of gravelly alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Ruston
The Ruston component makes up 90 percent of the map unit. Slopes are 2 to 8 percent. This component is on coastal plains. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. Loblolly Site Index = 91. Longleaf Site Index = 76. Slash Site Index = 91.

Gillsburg
The Gillsburg component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90.

STRATA

Strata 1 - Stands 1, 11, 16

Strata Description

160.79 Ac

Stands 1 (48.47ac); 11 (104.01ac); 16 (8.31ac)

This strata consist of 159 acres of pine sawtimber. The understory consists of hardwood underbrush about 8 feet high. They were thinned 15-18 years ago. This strata will be regenerated in two separate sales during the duration of this management plan.

Strata Recommendations

This strata will be allowed to mature, then will be artificially regenerated into loblolly pine. It will be managed on a 35 year rotation. Due to the size of this strata, it will be split into two timber sales in 2 different years.

Activity Recommendations

Harvest

A regeneration harvest will take place in 2017 on stand 11.

A regeneration harvest will take place in 2020 on stands 1 and 16.

Logging access is good year round in this strata.

Site Preparation

An aerial application of herbicide will be applied following the harvest. The type of chemical and rates of application will be determined following the timber harvest.

Regeneration

After the final harvest and site prep, these stands will be regenerated with genetically improved loblolly pine seedlings. Containerized seedlings will be used if available and will be planted on a 8 x 10 spacing.

Stand 11 will be regenerated in the Winter of 2017/2018.

Stand 1 and 16 will be regenerated in the Winter of 2020/2021.

Strata 3 - Stands 4, 12, 19

Strata Description

50.53 Acres

Stands 4 (2.93 Ac); 12 (3.16 Ac); 19 (44.44 Ac)

This strata consist of areas of Streamside Management Zone. They consist mostly of mature hardwoods with scattered pines throughout.

Strata Recommendations

This strata will remain in hardwoods and follow Best Management Practices for a Streamside Management Zone. Any harvesting activities within these stands will take place during the harvest of adjacent stands.

Strata 4 - Stand 5

Stand Description

147.05 Acres

Stand 5 (147.05 Ac)

This stand was final harvested in 2010. It was then chemically site prepped in the Fall of 2010. In January of 2011, this stand was hand planted with containerized loblolly pines. There are approximately 612 trees per acre.

Strata Recommendations

This strata will be grown to a 35 year rotation before a final harvest and reforestation is planned. There will be a 1st and 2nd thinning planned during this rotation, but there are currently no planned harvesting activities for the duration of this management plan.

Strata 6 - Stands 7, 8, 10, 15, 18, 20, 22

Strata Description

92.40 Acres

Stands 7 (4.91 Ac); 8 (2.85 Ac); 10 (34.95 Ac); 15 (15.77 Ac); 18 (6.57 Ac); 20 (21.19 Ac); 22 (6.16 Ac)

This strata consist of machine planted pine plantation that was thinned in the Fall/Winter of 2011. The stand is estimated to be approximately 22 years old. The stand basal area is currently about 70 square feet per acre.

Strata Recommendations

A second thin is planned in this strata for 2018.

A prescribed burn can be implemented to improve wildlife browse, reduce hardwood brush, and reduce widlfire danger. An understory of hardwood saplings and privet hedge could become a problem in this stand. This is a problem that would diminish the quality of forage available for wildlife, as well as, diminishing the quality of wildlife habitat and forest health. In the future, the stand may need to be chemically sprayed to control such

species, or a prescribed burn could be implemented. Optimally both practices could be used. If the combination is used, the burn should be implemented on a 2 to 3 years rotation after the spraying is completed. This will restore a more healthy wildlife habitat and forest. The prescribed burn will help control the unwanted understory vegetation. The burn will also allow more sunlight to reach the ground, spurring growth of new forage for wildlife species. All roads and firelanes should be maintained annually, and the stand should be grown to a 35 year rotation.

Because of the size and location of Stand 15, it will be final harvested in 2020 with Stands 1 and 16 in Strata 1.

Activity Recommendations

Harvest

This strata will have a second thinning in 2018. It will focus on removing poor quality, diseased, or poor formed trees. This thin will be based on single tree selection, and will bring the basal area down to approximately 70 square feet.

Because of the size and location of Stand 15, it will be final harvested in 2020 with Stands 1 and 16 in Strata 1.

Site Preparation

An aerial application of herbicide will be applied following the final harvest on Stand 15. The type of chemical and rates of application will be determined following the timber harvest.

Regeneration

After the final harvest and site prep on Stand 15, it will be regenerated with genetically improved loblolly pine seedlings. Containerized seedlings will be used if available and will be planted on a 8 x 10 spacing.

Strata 7 - Stand 13

Stand Description

148.51 Acres

Stand 13 (148.51 Ac)

This strata is approximately 9 years old. There is an estimated 500 trees per acre. There will be a first thin planned for 2019.

Stand Recommendations

A first thinning is scheduled in 2019. Every fourth row will be removed with thinning to take place in the remaining rows. It will focus on removing poor quality, diseased, or poor formed trees. Residual stocking will be 70 square feet per acre.

A prescribed burn can be implemented to improve wildlife browse, reduce hardwood brush, and reduce widlfire danger. An understory of hardwood saplings and privet hedge could become a problem in this stand. This is a problem that would diminish the quality of forage available for wildlife, as well as, diminishing the quality of wildlife habitat and forest health. In the future, the stand may need to be chemically sprayed to control such species, or a prescribed burn could be implemented. Optimally both practices could be used. If the combination is used, the burn should be implemented on a 2 to 3 years rotation after the spraying is completed. This will restore a more healthy wildlife habitat and forest. The prescribed burn will help control the unwanted understory vegetation. The burn will also allow more sunlight to reach the ground, spurring growth of new forage for wildlife species. All roads and firelanes should be maintained annually, and the stand should be grown to a 35 year rotation.

Activity Recommendations

Harvest

A first thinning is scheduled in 2019. Every fourth row will be removed with thinning to take place in the remaining rows. It will focus on removing poor quality, diseased, or poor formed trees. Residual stocking will be 70 square feet per acre.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

The boundary lines are being established and maintained to protect school board property from tresspass.

Line Recommendations

Once established, the boundary lines will need to be maintained on a 5 to 6 year rotation. Boundary lines will be surveyed in 2015 and repainted in 2020. Some boundary lines need to be resurveyed when an active timber sale is planned on that property line.

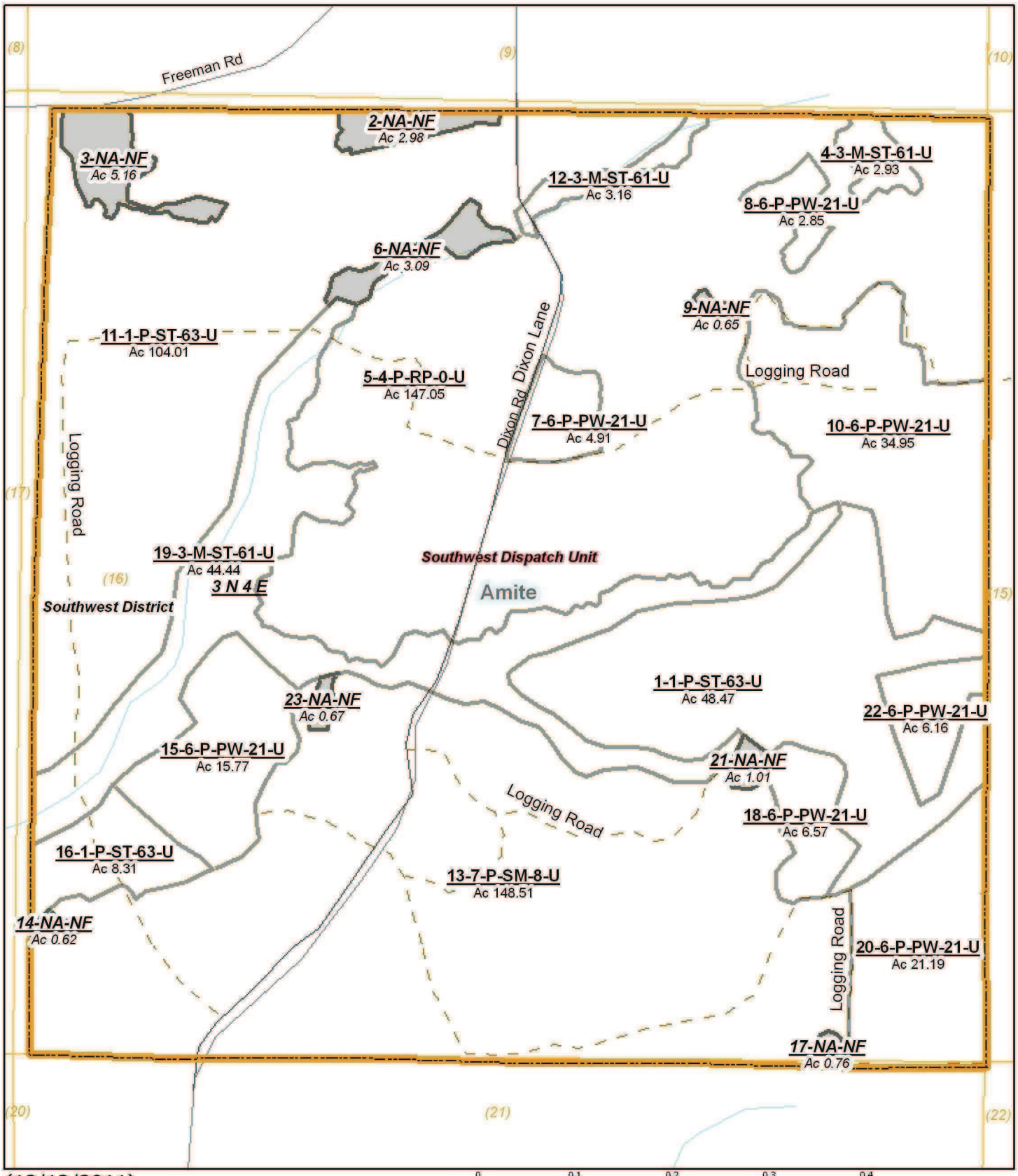
Activity Recommendations

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

Boundary lines will be surveyed in 2015 and repainted in 2020.

Amite County Schools

S16, 3N-4E
2011 to 2021
614.24 Acres +/-



(12/13/2011)

Amite County Schools

S16, 3N-4E
2011 to 2021
614.24 Acres +/-

(12/13/2011)

0 0.1 0.2 0.3 0.4 Miles

AMITE COUNTY SCHOOLS S16, 3N-4E

Property
- Property

Category 1: Stands
- Clear Cut
- Non-Stocked
- Reproduction
- Sub-Merchantable
- Pulpwood
- Chip-n-Saw
- Sawtimber
- Poles

Category 3: Non-Forest Stands
- Non-Forest

Structures
- Barn
- Tractor Shed
- Out Building
- Single-Family
- Multi-Family
- Camp House
- Club House
- Office Building
- Manufacturing
- Warehouse
- Chicken House
- Horse Stall
- Milking Parlor
- Hog Pen
- Blind
- Stand
- Hospital
- Nursing Home
- Dr. Clinic
- State Facility

Structures (cont)
- Office
- Work Center
- Materials Depot
- Prison
- School
- Church
- Mosque
- Synagogue
- Other

Property Roads/Trails
- Drive Ways
- Access Road
- Logging Road
- Skid Trail
- Farm Road
- Hiking Trail
- Horseback Riding Trail

Boundary Lines
- Archeology
- Cemetery
- Drilling Sites
- Education
- Forest Health
- Invasive Species
- Management Compartment
- Military Area
- Natural Area
- Property
- Recreation
- Rights of Way
- SMZ
- Special Use
- Stand
- Surface Mining

Boundary Lines (cont)
- Threatened/Endangered Species
- Visual Buffer

Transportation (Lines)
- City Streets
- County Roads
- 3 Digit Highway
- Interstate Highway
- US Highway
- State Highway
- Natchez Trace Parkway
- Runways/Airports
- Active RR
- Abandoned RR

Hydrology (Lines)
- Mississippi River
- Major River
- Primary Stream
- Intermittent Stream
- Canal
- Ditch
- Earthen Dam
- Concrete Dam

Utilities (Lines)
- Large Electrical
- Local Utility
- Large Pipeline
- Small Pipeline
- Gas Line
- Utility Line
- Water Line

Stand Activity Summary for
Amite County Schools
16 3N 4E

Filters Applied:
County: Amite
Client Class: School Trust Land
District: Southwest District
Client: Amite County Schools
STR: 16 3N 4E
Activity:
Year: 2012 Through 2021

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2017						
16 3N 4E	1	11	Harvest, Mechanical, Regeneration, Machine, Loblolly	104	$3,640.00	$248,471.60
			Yearly Totals	104	$3,640.00	$248,471.60
2018						
16 3N 4E	1	11	Site Preparation, Chemical, Broadcast, Aerial, Combination	104	$10,400.00	$0.00
16 3N 4E	1	11	Regeneration, Artificial, Plant, Hand, Loblolly	104	$10,400.00	$0.00
16 3N 4E	6	7	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	5	$175.00	$3,222.50
16 3N 4E	6	8	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	3	$105.00	$1,933.50
16 3N 4E	6	10	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	35	$1,225.00	$10,150.00
16 3N 4E	6	18	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	7	$229.95	$1,905.30
16 3N 4E	6	20	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	21	$741.65	$6,145.10
16 3N 4E	6	22	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	6	$215.60	$1,786.40
			Yearly Totals	285	$23,492.20	$25,142.80
2019						
16 3N 4E	7	13	Harvest, Mechanical, 1st Thin, Machine, Loblolly	149	$5,215.00	$40,230.00
			Yearly Totals	149	$5,215.00	$40,230.00
2020						
16 3N 4E	1	1	Harvest, Mechanical, Regeneration, Machine, Loblolly	48	$1,680.00	$114,679.20
16 3N 4E	1	16	Harvest, Mechanical, Regeneration, Machine, Loblolly	8	$280.00	$19,113.20

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
16 3N 4E	6	15	Harvest, Mechanical, Regeneration, Machine, Loblolly	16	$560.00	$20,624.00
			Yearly Totals	72	$2,520.00	$154,416.40
2021						
16 3N 4E	1	1	Regeneration, Artificial, Plant, Hand, Loblolly	48	$4,800.00	$0.00
16 3N 4E	1	1	Site Preparation, Chemical, Broadcast, Aerial, Combination	48	$4,800.00	$0.00
16 3N 4E	1	16	Regeneration, Artificial, Plant, Hand, Loblolly	8	$800.00	$0.00
16 3N 4E	1	16	Site Preparation, Chemical, Broadcast, Aerial, Combination	8	$800.00	$0.00
16 3N 4E	6	15	Site Preparation, Chemical, Broadcast, Aerial, Combination	16	$1,600.00	$0.00
16 3N 4E	6	15	Regeneration, Artificial, Plant, Hand, Loblolly	16	$1,600.00	$0.00
			Yearly Totals	144	$14,400.00	$0.00
			Grand Totals	**754**	**$49,267.20**	**$468,260.80**